

Mineral Industry Surveys

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BISMUTH IN THE FOURTH QUARTER 1999

Bismuth consumption in the United States increased nearly 10% to 533 metric tons during the fourth quarter of 1999 compared to the third quarter. Bismuth alloy consumption increased 20% and chemical uses increased 6%, but the consumption of metallurgical additives decreased slightly. Total consumption for the fourth quarter increased 4% compared to the fourth quarter of 1998. Preliminary data indicate that total domestic bismuth consumption in 1999 was nearly constant, decreasing less than 1% compared to 1998.

The New York dealer price for bismuth, as published in Platt's Metals Week, began the quarter at \$4.50 per pound, rose to \$4.65 per pound early in October and held steady until late November when it began to decline, reaching \$4.30 per pound by the end of the quarter.

Delays in restoring full bismuth output at Mexico's Industrias Peñoles plant, the world's largest producer, continued in the fourth quarter. In October, Peñoles forecast that 1999 bismuth output at the plant would be only 300 tons compared to 1,050 tons in 1998 (Mining Journal, 1999a). Although this reduction in supply could

have increased prices, the return of plentiful Chinese supplies exerted a greater influence that led to further declines in bismuth prices (Mining Journal, 1999b).

Domestic imports increased in October to 267 tons for the month, but fell to 112 tons in November. Projecting the average year-to-date imports through December, total imports would be about 2,100 tons, a significant drop compared to 2,700 tons in 1998.

Update

By February 3, the New York dealer price for bismuth had declined to \$3.95 per pound.

References Cited

- Mining Journal, 1999a, Minor metals lack lustre: Mining Journal, v. 333, no. 8556, November 5, p. 374-5.
——— 1999b, Minor metals—Gallium and selenium buck trend: Mining Journal, v. 333, no. 8560, December 3, p. 453.

TABLE 1
SALIENT BISMUTH STATISTICS 1/

(Kilograms, unless otherwise specified)

	1998	1999				Year to date
		First quarter	Second quarter	Third quarter	Fourth quarter	
Consumption	1,990,000	493,000	471,000	485,000	533,000	1,980,000
Exports 2/	245,000	74,900	42,600	46,200	NA	NA
Imports for consumption	2,720,000	472,000	528,000	546,000	NA	NA
Price per pound, dealer, end of period	\$3.15	\$3.40	\$3.70	\$4.50	\$4.30	XX
Stocks, end of period, consumer	175,000	140,000	192,000	143,000	130,000	XX

NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits.

2/ Comprises bismuth metal and the bismuth content of alloys and waste and scrap.

TABLE 2
BISMUTH METAL CONSUMED IN THE UNITED STATES, BY USE 1/

(Kilograms)

Use	1998	1999				Total
		First quarter	Second quarter	Third quarter	Fourth quarter	
Chemicals 2/	884,000	213,000	185,000	222,000	235,000	855,000
Bismuth alloys	741,000	179,000	195,000	173,000	208,000	756,000
Metallurgical additives	335,000	92,200	83,000	82,700	82,000	340,000
Other	32,000	8,000	7,000	8,000	8,000	31,000
Total	1,990,000	493,000	471,000	485,000	533,000	1,980,000

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes industrial and laboratory chemicals, cosmetics, and pharmaceuticals.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF BISMUTH METAL , BY COUNTRY 1/

(Kilograms)

Country	1998	1999 2/				Year to date
		September	Third quarter	October	November	
Bahamas, The	--	--	735	--	--	735
Belgium	739,000	43,600	196,000	103,000	56,100	706,000
Canada	155,000	2,250	28,900	24,000	3,560	103,000
China	385,000	76,300	176,000	83,400	8,480	490,000
Germany	45,400	10	227	--	--	1,490
Italy	850	--	--	--	--	400
Japan	1,200	300	940	800	500	2,760
Mexico	807,000	27,500	66,700	19,400	26,200	226,000
Netherlands	295	--	17,400	--	--	19,500
Peru	68,800	6,810	6,810	--	--	6,810
Russia	19,200	--	--	--	--	--
Spain	400	200	200	--	--	200
Switzerland	--	--	--	--	--	86
Taiwan	1,440	--	--	--	--	--
United Kingdom	492,000	18,300	51,500	35,700	17,000	367,000
Total	2,720,000	175,000	546,000	267,000	112,000	1,920,000

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ December data were not available at the time of publication.

Source: Bureau of the Census.

TABLE 4
U.S. EXPORTS OF BISMUTH METAL, ALLOYS, AND WASTE AND SCRAP, BY COUNTRY 1/

(Kilograms, metal content)

Country	1998	1999 2/				
		September	Third quarter	October	November	Year to date p/ 3/
Argentina	40	--	--	--	--	--
Australia	17	--	--	--	--	41
Belgium	84,200	--	--	775	18,200	63,900
Canada	80,000	5,260	27,600	5,390	343	82,900
China	1,310	--	--	--	--	--
Dominican Republic	2,400	78	292	45	42	1,040
Finland	1,140	--	--	--	--	--
Germany	32,100	--	9	--	--	74
Hong Kong	--	454	454	61	--	7,790
Ireland	--	94	94	--	--	94
Israel	696	--	--	--	--	--
Korea, Republic of	150	--	--	--	--	--
Malaysia	5,970	--	919	--	--	919
Mexico	5,190	4,080	7,710	5,850	5,740	22,300
New Zealand	--	--	--	--	--	50
Philippines	210	--	--	--	--	--
Saudi Arabia	50	--	--	--	--	--
Singapore	5,470	--	779	--	109	1,240
Taiwan	1,610	--	--	--	--	46
Trinidad and Tobago	--	--	--	5,220	--	15,900
United Kingdom	24,300	--	7,360	--	--	8,230
Venezuela	--	--	947	--	--	947
Total	245,000	9,960	46,200	17,300	24,400	205,000

p/ Preliminary.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ December data were not available at the time of publication.

3/ May include revisions to previous months' data.

Source: Bureau of the Census.